

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION

TRUE FITNESS TECHNOLOGY, INC.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	No. 4:99CV1306-DJS
	)	
PRECOR INCORPORATED,	)	
	)	
Defendant.	)	

ORDER

The parties are manufacturers of exercise equipment. Defendant Precor is the assignee of U.S. Patent Nos. 5,242,343 and 5,383,829 granted to Larry Miller for a "Stationary Exercise Device" more commonly known as an elliptical cross-trainer. Plaintiff True Fitness markets a device of the same nature, and seeks a declaratory judgment that its machine does not infringe the '829 patent and that the '829 patent is invalid. Defendant has filed a counterclaim for infringement. In Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996), the Supreme Court held that "the construction of a patent, including terms of art within its claim, is exclusively within the province of the court." The matter is now before the Court on the parties' joint motion seeking the Court's construction of disputed portions of the '829 patent's claims.

As indicated in the "Background of the Invention" section of the '829 patent, the elliptical cross-trainer is intended to be a machine "which provides for a smooth, natural action and which exercises a relatively large number of muscles through a large range of motion." '829 Patent, Col. 1, ll. 60-63. The user's feet are placed on parallel surfaces on what the patent calls "foot links," and as the machine is operated by the exertion of the user's legs, the feet move in a path of travel that is generally oval or elliptical in shape. Each of the seven claims of the '829 patent provide for a machine with a frame having a pivot axis by which one end of each foot link moves pivotally, and a guide or guide members engaging and directing the other end of the two foot links in a reciprocating path of travel.

The parties' joint motion identifies two apparently interrelated disputes concerning construction of the phrases highlighted below as found in claim 7 of the '829 patent:

...a guide supported by said frame and operative to engage said foot links and to direct a second end of each foot link along a preselected reciprocating path of travel as the first end of said foot link travels along said arcuate path...

With respect to each highlighted phrase, True Fitness urges a construction limiting the claim to guides and paths which are *inclined* relative to the floor. Precor contends that the language should not be construed in a manner limited to inclined guides and inclined paths of travel.

A number of general principles of claim construction have been enunciated in the case law, many of which are helpfully articulated by the Federal Circuit Court of Appeals in Vitronics Corporation v. Conceptronic, Inc., 90 F.3d 1576 (Fed.Cir. 1996). The scope of potential consideration includes intrinsic evidence, namely "the patent itself, including the claims, the specification and, if in evidence, the prosecution history," and extrinsic evidence, such as technical treatises, dictionaries, and prior art. Id. at 1582. "It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record," which "is the most significant source of the legally operative meaning of disputed claim language." Id.

The claim language itself is examined, and "words in a claim are generally given their ordinary and customary meaning." Id. The Court thus begins its analysis with an examination of the plain language of the claims. Claims 1 and 7 are the two independent claims of the '829 patent, and the nature of the claim construction task in this case warrants a side-by-side comparison of their language. The Court here sets forth the text of claim 1 and of claim 7, and highlights certain significant differences between the otherwise parallel language of the two claims:

1. An exercise device comprising:

a frame having a fixed pivot axis defined thereon, said frame configured to be supported on a floor;

a first and a second foot link, each having a foot engaging portion;

a first and a second coupling member, each associated with a respective one of said foot links for pivotally coupling said foot link to said pivot axis at a predetermined distance therefrom so that a first end of said foot link travels in an arcuate path about said axis;

a first and a second guide member, each guide member being supported by said frame and operative to engage a respective one of said foot links and to direct a second end of said foot link along a preselected, reciprocating path of travel, which is generally inclined with respect to said floor,  
as the first end of said foot link travels along said arcuate path; so that when said exercise device is in use, and when the second end of one of said foot links travels from a point at a lower end of said inclined path, upward along said inclined path, the heel portion of a user's foot associated therewith initially rises at a faster rate than the toe portion, and when the second end of said foot link travels downward, along said inclined, reciprocating path of travel, the heel portion of the user's foot initially lowers at a faster rate than the toe portion.

7. An exercise device comprising:

a frame having a pivot axis defined thereon, said frame configured to be supported on a floor;

a first and a second foot link, each having a foot engaging portion;

a first and second coupling member, each associated with a respective one of said foot links for pivotally coupling said foot link to said pivot axis at a predetermined distance therefrom so that a first end of said foot link travels in an arcuate path about said axis;

a guide  
supported by said frame and operative to engage said foot links and to direct a second end of each foot link along a preselected, reciprocating path of travel  
[no such language]  
as the first end of said foot link travels along said arcuate path; so that when said exercise device is in use, and when the second end of one of said foot links travels from a point at a rearward end of said reciprocating path, forward along said path, the heel portion of a user's foot associated therewith initially rises at a faster rate than the toe portion, and when the second end of said foot link travels rearward along said reciprocating path of travel from a forward end thereof, the heel portion of the user's foot initially lowers at a faster rate than the toe portion.

First, a threshold observation is in order, namely that the highlighted differences in language from one claim to the other appear certainly to be purposeful. Consideration of the particular language conveys this, as well as the general common sense principle of claim differentiation, which is the presumption that

the use of different words or phrases in separate claims conveys a difference in meaning and scope. Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1187, 48 USPQ2d 1001, 1005 (Fed.Cir.1998).

The final element of claim 7 is that in dispute between the parties. The final element of the otherwise largely analogous claim 1 expressly refers to a path of travel "which is generally inclined with respect to [the] floor." '829 Patent, Col. 6, ll. 19-20. Claim 7 does not contain such language. A strong presumption therefore arises that inclination is not a described feature of the final element of claim 7. The presumption is bolstered by consideration of the later highlighted differences in the final elements of claims 1 and 7. In claim 1, where inclination is claimed at Column 6, line 20, the path of travel of the user's foot is again a second, third and fourth time expressly referred to as "inclined," at lines 24, 25 and 29. Furthermore, the concept of inclination is implicitly reinforced by references to the "lower end" of the path of travel (l. 24), as well as to movement "upward" and "downward" along the path (ll. 25 & 28). By contrast, in claim 7, where no references to inclination are found, the directional references are "rearward" and "forward," suggesting an intentional avoidance of any vertical limitations on the path of travel. All these textual differences strongly support a

determination that claim 7 not be construed as limited to inclined guide members and inclined paths of travel.

True Fitness argues that the patent's specification, particularly its drawings and the disclosed embodiments of the device, describe the inclined features as necessary to the invention. The Court finds this argument unpersuasive. Figures 1, 3, 5 and 6 of the '829 patent show various embodiments of the device, each with an inclined guide member. Figures 2A, 2B, and 2C are schematic illustrations of the path of travel of the user's foot, each apparently based on an embodiment of the invention yielding an inclined path of travel. Figure 4, by contrast, depicts a "track-less" embodiment of the device, in which there is no inclined guide and in which the path of travel would appear to be more horizontal than in the embodiments shown in the other figures. Nonetheless, even a consistent feature of the patent's drawings cannot, without more, be construed as a limitation on a claim which contains no language indicating incorporation of that feature. See Advanced Cardiovascular Systems, Inc. v. Scimed Life Systems, Inc., 261 F.3d 1329, 1339 (Fed.Cir. 2001), *citing Johnson Worldwide Associates, Inc. v. Zebco Corp.*, 175 F.3d 985, 992 (Fed.Cir.1999); Gart v. Logitech, Inc., 254 F.3d 1334, 1343 (Fed.Cir. 2001). Although in part boilerplate, the specification contains language rightly to that effect:

The principles of the present invention may be adapted to the construction of a variety of other embodiments...The

shape and position of the guide members may be...varied...Accordingly, it will be appreciated that the foregoing drawings, discussion and description are merely meant to illustrate particular embodiments of the invention and are not meant to be limitations upon the practice thereof.

'829 Patent, Col. 5, l.56 - Col. 6, l.1.

In addition, although there is a reference to an "inclined, oval path of travel" in the Abstract on the face of the patent, the overall language of the specification is neutral in the sense that it does not suggest that an inclined guide or path of travel is necessary to the invention. The Court notes the following examples of such neutrality. The Brief Description of the Invention, although it makes reference to two other features claimed in claim 1 (the *fixed* pivot axis and *first and second* guide member), does not include claim 1's references to an inclined path of travel. Contemplating various possible embodiments of the device, the Brief Description indicates that the guide member "may comprise a track" or "may comprise a pair of arms," but makes no indication that the guide member be inclined. '829 Patent, Col. 2, ll. 26-28.

Significantly, the Detailed Description of the Invention does not contain the word "inclined" or any variant thereof. Instead, the path of travel is repeatedly referred to as "arcuate" or "reciprocal." "Arcuate" is expressly defined as referring "to a circular oval or other such closed, curved path of travel," without reference to inclination. Id. at Col. 3, ll. 9, 12-14. In

the next paragraph, the specification addresses the scope of the notion of a "reciprocal" path of travel:

Within the context of the this [sic] application, a "reciprocal" path of travel is meant to define any back and forth path of travel which is repetitively traversed by the end of the foot link and includes a generally linear path of travel as is provided by the flat track **28, 32** of the FIG. 1 embodiment as well as curved paths of travel provided by other embodiments shown herein.

Id. at Col. 3, ll. 20-26. This language does not reflect inclination.

Later references to the "forward and upward motion of the foot" and "the subsequent rearward and downward motion of the foot" at Col. 3, ll. 53-4 and 59-60 do not inherently express the concept of inclination, as a foot traveling in an arcuate path oriented in the vertical plane, whether the path is horizontal or on an incline, will necessary move somewhat upward and downward as the foot traverses the curve itself. Exegesis of the specification is said usually to be "dispositive," as "it is the single best guide to the meaning of a disputed term." Vitronics, 90 F.3d at 1582. The foregoing analysis of the specification bolsters the Court's original conclusion based on the plain language of the claims themselves, that claim 7 cannot be construed as limited to inclined guides and inclined paths of travel.

True Fitness further argues, however, that in the prosecution of the '829 patent the inventor repeatedly distinguished the prior art based on the inclined features of the



invention, and touted the inclined features as essential to achieving the ergonomic benefits of the invention. The prosecution history of the patent may provide information relevant to claim interpretation, such as "any express representations made by the applicant regarding the scope of the claims." Id. In this case, however, the inventor's only express representations concerning the scope of claim 7 do not limit it, but rather highlight its broader scope as compared to claim 1. Far from disclaiming or relinquishing a broader reading of claim 7, the amendment proffering claim 36 (which ultimately became claim 7 of the '829 patent) expressly acknowledged the three principal differences between claim 7 and what ultimately became claim 1, namely elimination of the reference to two guide members, to the pivot point as fixed, and to "the path of travel as inclined." Jnt. Exh. 2, Paper 8 at p.6.

Admittedly, the prosecution history shows the inventor's repeated references to an inclined track, among other features, as distinguishing other and different claims from the prior art, but these occurred earlier and in support of claims in which inclination was an express element. Those statements do not limit the scope of claim 7, from which the reference to inclination was purposefully eliminated and expressly noted to the examiner. As the Federal Circuit has noted, "claim terms cannot be narrowed by reference to the written description or prosecution history unless

the language of the claims invites reference to those sources.” Johnson Worldwide Associates, Inc. v. Zebco Corp., 175 F.3d 985, 989-90 (Fed.Cir. 1999).

Whether inclination is in fact necessary to distinguish the invention from the prior art is not a question for determination at this time. In essence, True Fitness’ arguments concerning the prior art and the inventor’s statements to the examiner go to issues of patentability and validity, rather than to claim construction. The Court resists conflating the step of claim construction with invalidity determinations, noting that validity is not properly at issue and fully briefed, and that where the patentee urges adoption of its claim interpretation, it “bears the risk that the claim may later be found invalid.” Berg Technology, Inc. v. Foxconn International, Inc., 1999 WL 96414 at \*4 (Fed.Cir. Feb. 23, 1999).

Consideration of extrinsic evidence is resorted to “[o]nly if there [is] still some genuine ambiguity in the claims, after consideration of all available intrinsic evidence.” Vitronics, 90 F.3d at 1584. Opinion testimony from an expert or an inventor is not properly relied upon if inconsistent with the specification and file history, and may not be considered unless “the patent documents, taken as a whole, are insufficient to enable the court to construe disputed claim terms” -- an instance which “will rarely, if ever, occur.” Id. at 1585. As indicated by the

foregoing analysis, the Court believes that the patent documents themselves are sufficient to determine the claim interpretation at issue here. The Court does not rely upon, and so does not discuss, the expert testimony offered by both parties at the Markman hearing.

Based on the rationale set forth above, the Court concludes that claim 7 cannot properly be construed as limited to inclined tracks and inclined paths of travel. Accordingly,

**IT IS HEREBY ORDERED** that the parties' joint motion for claim construction by the Court [Doc. #74] is granted as follows.

**IT IS FURTHER ORDERED** that the fourth element of claim 7 of U.S. Patent No. 5,383,829 is not limited to guides which are inclined relative to the floor or to inclined paths of travel.

Dated this \_\_\_\_\_ day of November, 2001.

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United States District Judge